

INPLASY

Pharmacist–psychiatrist collaboration in psychiatry: protocol for a systematic review of pharmacist-led interventions in patients with schizophrenia

INPLASY202570059

doi: 10.37766/inplasy2025.7.0059

Received: 14 July 2025

Published: 14 July 2025

Granier, J.

Corresponding author:

juliette Granier

juliette.granier@orange.fr

Author Affiliation:

université de Paris cité.

ADMINISTRATIVE INFORMATION

Support - This review received no specific funding or external support.

Review Stage at time of this submission - Formal screening of search results against eligibility criteria.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202570059

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 14 July 2025 and was last updated on 14 July 2025.

INTRODUCTION

Review question / Objective The objective of this literature review is to examine the effects of pharmacist-led interventions in patients with schizophrenia, within the context of a structured collaboration with psychiatrists.

Rationale Patients with schizophrenia are at high risk of relapse and rehospitalization, partly due to poor adherence to antipsychotic treatment. In recent years, drug shortages have further threatened the continuity of care. While several studies suggest that pharmacists can play a key role in improving adherence and monitoring side effects, their integration into psychiatric care remains poorly structured. A comprehensive review is needed to synthesize current evidence on the impact of pharmacist-led interventions in collaboration with psychiatrists, and to inform future care models.

Condition being studied Condition being studied: Schizophrenia, a chronic psychiatric disorder

characterized by psychosis, poor treatment adherence, and high relapse risk.

METHODS

Search strategy A systematic literature search was conducted in PubMed (MEDLINE) using the following combination of MeSH terms and keywords: ("Pharmacists"[Mesh] OR pharmacist* OR "pharmaceutical care" OR "Community Pharmacy Services"[Mesh] OR "Hospital Pharmacy Service"[Mesh]) AND ("Antipsychotic Agents"[Mesh] OR antipsychotic* OR neuroleptic*) AND ("Schizophrenia"[Mesh] OR schizophrenia) AND ("Medication Therapy Management"[Mesh] OR "Patient Care"[Mesh] OR "pharmaceutical services" OR intervention OR role OR counselling OR education) AND ("Medication Adherence"[Mesh] OR adherence OR compliance OR persistence OR relapse OR hospitalization OR cost*). Only articles published in English or French were included. Only articles published in the last 10 years (from 2015 to 2025) were included. Language was restricted to English and French.

Reference lists of included studies were also manually screened to identify additional eligible publications.

Participant or population Adults diagnosed with schizophrenia (according to DSM or ICD criteria), regardless of gender or clinical subtype, receiving antipsychotic treatment.

Intervention Pharmacist-led interventions such as medication counselling, adherence support, therapeutic education, medication review, monitoring of adverse effects, and collaboration with psychiatrists in the management of antipsychotic treatments.

Comparator Usual care without pharmacist intervention, or alternative non-pharmacist-led approaches when applicable.

Study designs to be included Randomized controlled trials (RCTs), observational studies (cohort, case-control, and cross-sectional studies), and systematic reviews.

Eligibility criteria

Inclusion criteria:

Studies involving adult patients diagnosed with schizophrenia.

Studies including a pharmacist-led intervention (e.g., medication counselling, therapeutic education, adherence support, medication management).

Studies focusing on antipsychotic treatments (oral or long-acting injectable).

Articles published in English or French.

Types of studies: randomized controlled trials, observational studies, and systematic reviews.

Exclusion criteria:

Studies not specifically focusing on schizophrenia (e.g., bipolar disorder, depression alone).

Studies involving only physicians, nurses, or other professionals, without any pharmacist involvement.

Letters to the editor, commentaries, study protocols without results, or non-peer-reviewed posters.

Animal or preclinical studies.

Information sources The primary information source was PubMed (MEDLINE). The reference lists of included articles were also screened manually to identify additional studies.

Main outcome(s) Primary outcome: Medication adherence, assessed through validated measures such as Medication Possession Ratio (MPR), Proportion of Days Covered (PDC), or adherence scales (e.g., MMAS-8).

Additional outcome(s) Secondary outcomes:

Relapse rates

Psychiatric rehospitalizations

Symptom improvement (e.g., PANSS or other clinical scales)

Detection and management of adverse drug reactions

Health care costs related to treatment adherence

Patient satisfaction and therapeutic alliance

Discontinuation of antipsychotic treatment.

Data management Data will be extracted using a standardized form. A quality check will be performed to ensure consistency. All data will be stored in Excel with backup on a secure drive. Study selection decisions will be documented and visualized in a PRISMA flowchart.

Quality assessment / Risk of bias analysis Risk of bias will be assessed using the Cochrane RoB 2 tool for RCTs, the Newcastle-Ottawa Scale for observational studies, and AMSTAR 2 for systematic reviews. A quality control process will be applied to ensure consistency in scoring and interpretation.

Strategy of data synthesis A narrative synthesis will be conducted. The results will be organized by type of intervention and outcome. No meta-analysis is planned due to expected clinical and methodological heterogeneity among the included studies.

Subgroup analysis If data allow, subgroup analyses will be performed based on the type of pharmacist intervention (e.g., counselling, adherence monitoring, medication review), the formulation of antipsychotic treatment (oral vs long-acting injectable), and study setting (hospital vs community pharmacy). Other subgroups may

include the presence of psychiatric comorbidities or type of adherence measure used.

Sensitivity analysis A meta-analysis is not planned due to anticipated heterogeneity in study designs, interventions, and outcome measures. However, a sensitivity analysis will be conducted within the narrative synthesis by assessing whether the exclusion of studies with a high risk of bias significantly affects the overall interpretation of results.

Language restriction Language will be restricted to English and French, as these are the languages understood by the reviewers. Studies published in other languages will be excluded.

Country(ies) involved France.

Other relevant information This review is part of a medical thesis (thèse de médecine) at Université Paris Cité – Faculté de Médecine. It aims to contribute to the understanding of pharmacist–psychiatrist collaboration in schizophrenia care, particularly in the context of antipsychotic shortages and treatment adherence issues.

Keywords schizophrenia, antipsychotics, pharmacist, adherence, medication management, pharmaceutical intervention, psychiatric care, pharmacist–psychiatrist collaboration.

Dissemination plans The results of this review will be presented as part of a medical thesis at Université Paris Cité – Faculté de Médecine. Findings may also be presented at academic seminars or considered for publication in a peer-reviewed journal focusing on psychiatry or clinical pharmacy.

Contributions of each author

Author 1 - juliette Granier - juliette Granier conceived the study, developed the protocol, conducted the literature search, selected studies, extracted and analyzed data, assessed risk of bias, and drafted the manuscript. This work is conducted independently as part of a medical thesis at Université Paris Cité – Faculté de Médecine.

Email: juliette.granier@orange.fr